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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,043	03/23/2001	Takashi Tsuchiya	09792909-4862	6182
26263	7590	03/29/2005	EXAMINER	
SONNENSCHN NATH & ROSENTHAL LLP P.O. BOX 061080 WACKER DRIVE STATION, SEARS TOWER CHICAGO, IL 60606-1080			KOSTAK, VICTOR R	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/816,043

Applicant(s)

TSUCHIYA ET AL.

Examiner

Victor R. Kostak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 15 is/are rejected.
- 7) ☒ Claim(s) 6-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/03/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. Regarding a first matter, applicant's representative presents the application serial number as the registration number instead of the actual registration number upon signing off the response.

2. Applicant's arguments filed on 12/27/04 have been fully considered but they are not persuasive. The previous rejection accordingly still applies and is presented below, repeated from the last Office action. Applicant's arguments are addressed in the context of the rejection.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2 and 15 stand rejected under 35 U.S.C. 102(e) as being anticipated by Nagao '992.

Reviewing Nagao, his image processing apparatus 10 of Nagao (noting particularly Figs. 1 and 2) includes a processing arrangement that carries out compression of the dynamic range done by element 18 (col. 7 lines 36 and 43-47); a smoothing operation that preserves edge integrity, carried out by element 26 (col. 12 lines 41-42 and 56-57); correction coefficient generation for providing corrected signal values (i.e. gain, amplitude) in response to the smoothing operation (element 36 of component 20: col. 13 line 10+); and wherein element 36

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accordingly generates modified pixels as a result of the composite processing, to an output apparatus 16 (any of various types: col. 7 lines 4-15).

Applicant argues that output signal  $I_{AV}$  of subsection 26 is either subtracted from or added to another signal, but a gain coefficient is not generated according to an output of the smoothing process.

The examiner does not dismiss the fact that signal  $I_{AV}$  is additionally processed as stated. However, signal  $I_{AV}$  is also passed to subsection 36, which as the examiner explained in the last Office action (and repeated above) is processed in a manner effecting its gain by way of coefficient application, and which is directly dictated by output  $I_{AV}$  of the smoothing subsection (as well as by the output of subsection 34). The coefficient processing accordingly corrects signal  $I_{AV}$  applied thereto to output a resultant corrected image signal. The applicant does not acknowledge this. Claims 1, 2 and 15 therefore accordingly stand rejected.

Applicant does not argue the dependent claims individually but instead relies on the patentability of their base claims. Those rejected claims accordingly stand rejected as explained in the last Office action, repeated below.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Nagao '992.

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Regarding claim 3, Nagao points out that he can apply any of many various types of processing by element 18 (col. 7 lines 36-47), as well as a multitude of smoothing techniques by element 26 (col. 12 lines 43-62). Included in his processing by element 18 is gradation correction (col. 7 line 44), which would have been obvious to apply at any stage of the pixel correction prior to actually presenting the image on the output apparatus 16, such being inconsequential since the operations are worked in stages as a composite overall correction process.

As for claim 4, the correction process involves modifying pixels by adjusting amplitude of the input so dictated by the subsequent processing involving the smoothing operation, which one of ordinary skill in the art would have readily recognized would involve an increase or a decrease in amplitude (Nagao mentions noise suppression and sharpness enhancement: col. 7 lines 26-31), which involve subtractive and additive functions). Furthermore, and as mentioned above, Nagao allows for any of a multitude of smoothing operations to be applied to the input pixels (noting again col. 12 lines 43-62)

As for claim 5, Nagao adjusts the dynamic range, as mentioned previously (and noting col. 7 lines 46-47) and applies noise suppression as discussed above, and it would have been obvious to carry out the separate processing stages in any order so arranged since the stages together constitute an overall operation involving pixel value adjustment, which stages are additive and multiplicative functions.

5. Claims 6-14 appear allowable over the prior art.

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6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor R. Kostak whose telephone number is (571) 272-7348. The examiner can normally be reached on Monday - Friday from 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Any response to this final action should be mailed to:**

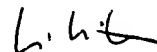
Box AF  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**Or faxed to:**

**(703) 872-9306 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 308-HELP.



Victor R. Kostak  
Primary Examiner  
Art Unit 2614

VRK